COORDINATION RECORD

SOURCE: SAF/OIP for Lockheed

CASE NO. 76-2004

FILE NO. 690

5 CYS 11 PP

DESCRIPTION

Ad - No. 350 - The US has Launched over 650 spacecraft Lockheed has built 350 of them.

[redacted]

Attached information is forwarded for review and comments in accordance with guidelines on reverse side. Questions should be directed to the Department of the Air Force (SAF/OIS), Office for Security Review, extension 79542 or 73994.

COORDINATION	DATE OUT	SUSPENSE	DATE BACK	OIS USE
AF/LG	12/6	12/13		
AF/RD	12/6	12/13		
AF/XO	12/6	12/13		
SAF/SS	12/6	12/13		
SAF/OIP	12/6	12/13		

REVIEWER: Capt Miller

DATE RECEIVED: 12/6

FOR AIR STAFF/SECRETARIAT COORDINATION

TO: Office for Air Force Security Review (SAF/OIS)

We have reviewed the attached information and our recommendation for public release is as follows:

☐ No objection

☐ No objection subject to amendments for security and policy as indicated by brackets[ ]in black pencil. Editorial amendments are lined through once with black pencil (Do not use Brackets). Substitute language will be entered in black pencil.

☒ Objection. Amendments to permit publication are impractical. Reasons are stated below.

The LMSC Ad is not appropriate and should not be approved. Suggest the package be returned to SAMSO for further work with LMSC and additional staffing.

DATE: 8 Dec 76

TYPE NAME, TITLE, ORGANIZATION: SAF SS

[redacted]

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (PA)

ATTN: DSR -

(THRU)

DATE

The attached material is forwarded with recommendation for public release, as amended, under the provisions of DOD Directive 5230.9. I am authorized to make this recommendation in behalf of the Secretary of the Air Force.

A reply is requested by:

ATCH

—— COPIES

AFHQ FORM FEB 71 0-201

No. 350

The U.S. Has Launched Over 650 Spacecraft
Lockheed Has Built 350 Of Them.

Since America's first spacecraft orbited in 1959, there have been over 650 U.S. spacecraft launched. Lockheed Missiles and Space Company has designed and built more than half of them. Number 350 was launched recently, and more will have followed by the time you read this ad. Lockheed also is far ahead of any other U.S. firm in different types of spacecraft launched.

An unmatched record in building spacecraft.
One of the technological achievements of the 55,000 workers at Lockheed.

Lockheed
MISSILES
& SPACE
COMPANY,
INC.

November 16, 1976

Department of the Air Force
SAFOI
Washington, D. C. 20330

Subject: Material for Public Release

Lockheed Missiles & Space Company requests Air Force approval for public release of the attached advertisement marking the launch of the 350th Lockheed-built spacecraft. Six copies of the proposed ad are attached for your review.

Also attached are three other cleared documents which establish precedent for our request. These documents are:

- An article prepared for Signal Magazine, which notes that Lockheed-built spacecraft have been used in more than 300 space flights (the officially cleared figure up to this time).
- A news release dated 5 August 70 in which the Air Force and Lockheed announce the 300th Agena flight.
- A Collier Trophy submission, cleared in 1966, which announces the 200th Agena flight and gives considerable detail on the vehicle.

All of the material proposed for release is unclassified. The photo is a Titan IIIB Agena, cleared several years ago, and since used for a number of public relations purposes. Up to date figures on U.S. space launches are published by a number of sources.

The documents listed above indicate that it has been Air Force policy to permit announcement of significant space milestones at appropriate intervals.

The ad submitted here, if approved, will appear in newspapers in Lockheed plant cities and in other major dailies. We feel this ad, and others in a campaign currently being run, are essential to restore some balance in the present public view of Lockheed. We feel the people of Lockheed Missiles & Space Company have performed well during their entire association with the Air Force; and we feel it is in your best interest, as well as our own, to let the public know of this remarkable achievement.

[redacted]

A SUBSIDIARY OF LOCKHEED AIRCRAFT CORPORATION

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SYSTEMS COMMAND
ANDREWS AIR FORCE BASE, DC 20334

REPLY TO ATTN OF: OIS

23 NOV 1976

SUBJECT: Request for Review, Case # AFSC/OIS ________

TO: SDSS

1. The attached item is proposed for public release. It is requested that you review it for technical accuracy, security and/or propriety. If this item, in your opinion, requires review by other AFSC staff members, it is requested that it be forwarded and this office advised by telephone (extension 3971) of such referral.

2. This office welcomes any comments, corrections, additions or deletions which you believe will improve the material.

3. Please return all correspondence to OIS upon completion of review.

4. In order to meet our suspense on the clearance, it is requested that you return the material to us not later than ASAP.

BEN R. FERN
Chief, Security Review/
Industry Relations
Office of Information

1st Ind/SDSD 24 Nov 76

To: OIS

Material has been reviewed and has been found to be technically accurate and unclassified. YES ________ NO ________

Recommend approval X ________ See Comment
Recommend approval as amended ________
Recommend disapproval ________

Comments: The proposed advertisement refers to the Agena as a spacecraft. A number of the satellites launched on the 350 Agenas were not built by Lockheed. There could be some misinterpretation in the advertisement as written.

Further, the LMSC letter states that the Titan IIIB/Agena picture was previously cleared. This should be verified prior to release.

~~Victor W. Whitehead~~
Major, USAF

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A.W.Stewart 24-01/101 2cys w/encl
CCC 25-63/150 orig w/o encl
CCC distr. 11-5-75rb

LMSC D462574

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SPACE AND MISSILE SYSTEMS ORGANIZATION (AFSC)
LOS ANGELES AIR FORCE STATION, PO BOX 92960, WORLDWAY POSTAL CENTER
LOS ANGELES, CALIFORNIA 90009

REPLY TO
ATTN OF: OIS

3 NOV 1975

SUBJECT: Review of Material for Public Release

[redacted]

1. The following material submitted to this headquarters on 10 October 1975 has been reviewed and determined to be unclassified ~~(as amended)~~. ARTICLE for SIGNAL Magazine; LMSC Background Information.

2. This headquarters interposes no objection to its public release (as amended). This letter confirms telecon approval from SAMSO/OIS on 30 October 1975.

[redacted]

1 Atch
Article

Recommend approval
Recommend approval as amended
Recommend disapproval
Comments: The proposed ...

A number of the satellites launched

Lockheed

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RECEIVED
NOV 5 1975
CORRESPONDENCE CONTROL FILES
LMSC

DISPATCH
NOV 5 1975
CORRESPONDENCE CONTROL FILES
LMSC

OIS-1364

Draft Copy for SIGNAL Magazine's January 1976 AFCEA Group Member Capabilities Directory:

LOCKHEED MISSILES & SPACE COMPANY

President — William B. Rieke
1111 Lockheed Way
Sunnyvale, California 94088
Telephone Number: (408) 742-4321

PHOTO ATTACHED (and identified on the back)

PHOTO ATTACHED (and identified on the back)

President
W. B. Rieke

AFCEA Contact
Dr. J. H. Hockenberry

Lockheed Missiles & Space Co. (LMSC) is a major contractor for space and missile systems, as well as a number of other high-technology products and services. Lockheed's versatile AGENA has served as booster or satellite on more missions than any other spacecraft (over 300 space flights, or nearly half of the U.S. total). The dependable 3-axis-stabilized vehicle continues to be employed in a number of programs, [redacted] In addition, the company builds spin-stabilized satellites, principally for use in space research programs. LMSC is also known for its work in space communications; most recently, notable breakthroughs have been announced in multiple-beam antenna subsystems now being proposed for use in new generations of communications satellites. In the field of command-and-control, LMSC serves as prime contractor for technical and operations support at the U.S. Air Force's Satellite Test Center, [redacted] The company also builds tactical C^3 systems, such as the U.S. Navy's "Outlaw Hawk" command centers on the Hawaiian mainland and aboard the aircraft carrier Kitty Hawk. For the Space Shuttle, LMSC is providing more than 34,000 tiles of a unique silica insulation for each orbiter vehicle. Designed to protect the Shuttle from re-entry temperatures up to 2300°F, the reusable material dissipates surface heat so quickly a tile can be handled without gloves while its interior is still red hot. LMSC also is under contract to NASA for preliminary design studies on one of the Shuttle's first payloads: the Large Space Telescope. The company developed and produced the Polaris and Poseidon families of submarine-launched missiles and is now working on the new Trident I (C-4) fleet ballistic missile system for the U.S. Navy. LMSC is also under contract to both the U.S. Army and Air Force for development of advanced mini-RPVs (remotely piloted vehicles). Company scientists are engaged in literally hundreds of basic research projects in more than 40 areas of scientific inquiry, and have made numerous discoveries now being employed in other major business areas (including energy/power systems; environmental waste/pollution control systems; information retrieval and telemedicine systems; oceanographic submersible vehicles, and others). LMSC has approximately 20,000 employees and is a wholly-owned subsidiary of Lockheed Aircraft Corp. Gross sales of the parent corporation for the last four quarters (ending June 29, 1975): $3,264,000,000.

" " "

4 AUG 1970

NEWSBUREAU
LOCKHEED MISSILES & SPACE COMPANY
(A DIVISION OF LOCKHEED AIRCRAFT CORP.)
SUNNYVALE, CALIF. -- (408) 742-6688
(Writer: Jim Upshaw)

FOR RELEASE: WEDNESDAY,
AUG. 5, 1970

SPACE MILESTONE: AGENA LAUNCH MARK HAS TOPPED 300

SUNNYVALE, Calif. -- A space milestone was revealed today when the Air Force and Lockheed announced more than 300 Agena space vehicles have been launched.

The Agena is the world's most widely used space vehicle, and has military applications as well as civilian roles that have ranged from planetary probes to the two-man Gemini missions. Modernization keeps the vehicle continually useful.

Since its first launch, on Feb. 28, 1959, the Agena has set records for reliability. In the past three years, the Agena has had a 100 per cent success rating in launches for the Air Force and the National Aeronautics and Space Administration.

Lt. Gen. Sam C. Phillips, commander of the Air Force Space and Missile Systems Organization (SAMSO), praised the Lockheed-built Agena's performance. "The usefulness of this vehicle has been outstanding in the 11 years since its first launch," Phillips said. "Both in military work and in civilian missions, the Agena has served this country well."

Besides being reliable, the Agena has been used in more missions than any other space vehicle. From 1957 through 1969, Agenas were involved in more than half of all U.S. launches--attesting to a unique level of versatility.

- more -

Flexibility is another Agena asset. The do-anything spacecraft can be launched from either Vandenberg Air Force Base, Calif., or Cape Kennedy, Fla., and can perform missions in polar or equatorial orbits which are circular, elliptical or synchronous (fixed in relation to the earth as it rotates).

Versions of the vehicle have placed satellites in earth orbit, boosted probes toward the moon and planets, served as target vehicles in the Gemini program, and acted as orbiting experiment platforms. NASA has studied ways of using derivatives of the Agena as self-contained scientific satellites.

The two most recent Agena launches by NASA testify to the craft's broad usefulness. Last February, an Agena carried a mercury ion engine into earth orbit and will remain with it for months in a historic test of electric propulsion in space. In April, an Agena injected the latest in the Nimbus weather satellite series into orbit.

Some of the vehicle's tasks have been spectacular in engineering terms. Late in 1965, for example, an Agena lifted two related satellites in tandem--Explorer 31 and the Canadian Alouette 2--into space and injected them, one at a time, into virtually identical orbits. As many as 12 experiments have been sent into space aboard a single Agena.

The Agena grew out of a project begun in the late 1950s by SAMSO's predecessor organization, the Air Force Ballistic Missile Division, and Lockheed Missiles & Space Co., based here.

Goal of the project was development of an unmanned vehicle that could perform more maneuvers than any spacecraft previously designed, thus opening a new range of mission possibilities.

The goal was met and exceeded. The Agena became the first space vehicle ever to achieve circular earth orbit, to be controlled on orbit by ground command, to propel itself from one orbit to another, and to accomplish a number of other unprecedented tasks.

Source of the Agena's name is a distant blue star which is 5,000 times as bright as the sun.

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COLLIER TROPHY SUB SION

Nominee: The United States Air Force and Industry Team responsible for the Agena

By: Vernon A. Johnson, member of the Board of Directors, National Aeronautic Association

For: Demonstrating the continuing reliability, efficiency, and versatility of the Agena satellite/booster/target vehicle in a variety of manned and unmanned missions

Justification: In 1956-- a year before Sputnik I ushered in the space age and during a period when the scientific community was concerned with orbiting a six and a half pound, grapefruit size satellite--the U. S. Air Force began development and production of a satellite which would weigh several thousand pounds on orbit and which could be precisely controlled. A contract for this work was awarded to the Lockheed Missiles & Space Division.

Today that vehicle is known as the Air Force Agena and in 1966 passed its 200th launch successfully--a record for any space vehicle U. S. or foreign.

The Agena has, from its first journey into orbit in early 1959, continued to carry out the majority of space missions of both the Air Force and the National Aeronautics and Space Administration.

During 1966, the Agena was involved in over 50 per cent of all United States space launches. From the beginning of the United States space program, the Agena has been involved in 53 per cent of all launch attempts, and in almost 60 per cent of all successful launch efforts.

ELECTRIC
Power Supply

It is the most versatile as well as the most used of all satellites. It is completely stabilized, completely controllable, and completely maneuverable in space. It has carried more diversified experiments than any other satellite. It has carried the most types of power supply, including a nuclear reactor. It has had more restarts in orbit, and has been used on more different boosters -- the Thor, Atlas, Thrust-Augmented Thor, Long Tank Thor, and Titan III-B.

CLEARED
FOR OPEN PUBLICATION
17 FEB [illegible] 12
DIRECTORATE FOR SECURITY REVIEW (OASD-PA)
DEPARTMENT OF DEFENSE

The Air Force Agena starts as a basic, production-line item, and can be modified for a particular mission. In Air Force missions, it has demonstrated its ability to operate as a long-life spacecraft. ~~Such~~ Data has contributed vastly to the total Air Force knowledge of space and how to use it.

second

Moreover, the Agena system and its attached payload equipment have functioned in excess of six months on a single Air Force flight.

As a satellite, the Agena has placed itself in a variety of programmed orbits, from 100 miles circular to 50,000 miles eccentric. While operating as an Air Force satellite itself the Agena has also carried into space -- and released into their own orbits -- auxiliary or piggyback satellites.

As an in-orbit booster on NASA programs, the Agena has orbited a wide variety of observatory and meteorological satellites, and has sent spacecraft to the moon, Mars and Venus. During 1966, there were seven such missions, includi the first two Lunar Orbiters.

As a target vehicle, the Agena dramatically displayed its reliability and versatility -- its stability, controllability, and maneuverability -- during five Gemini flights. Attached to the Gemini spacecraft the Air Force Agena carried man to new altitude records -- to approximately 852 miles in Gemini TI --and in the same flight it propelled man faster than he had ever traveled before, approximately ~~18,~~000 miles per hour.
17,930)

In more than 25 different types of missions in 14 major programs, the Air Force-developed Agena has achieved a reliability of better than 95 per cent. Its capability, moreover, has continued to increase. During 1966, the operating lifetime of an Agena in orbit lengthened significa and payload weights were double those of three years ago.

For Agena performance, the Air Force in 1966 gave Lockheed Missiles & Space Company, prime contractor, the Air Force Zero Defects Craftsmanship Award, which is the highest attainable recognition in the Air Force Industrial Defects Program.

Through the reliable and versatile Air Force Agena more than score of world space firsts have been written into the record book in the name of the United States of America.

Most noteworthy in this impressive list are:

First spacecraft to achieve ~~polar~~ CIRCULAR orbit ...

First to achieve a polar orbit...

First to be stabilized all three axes in orbit...

First to be controlled on orbit by ground command...

First to return a man-made object from space ...

First to propel itself from one orbit to another...

First to propel a spacecraft on a successful Mars flyby...

First to propel~~l~~ a spacecraft on a successful Venus flyby...

First rendezvous and docking of two spacecraft ...

First space vehicle to provide propulsive power for another...

Propelled man to a new world altitude record-- 853 ~~739~~ ~~nautical~~ miles.....

Propelled man faster than he had ever travelled before -- ~~15,592~~ 17,930 miles per hour

The busiest and best year of Agena's life to date was 1966. This was, of all years in the history of aeronautics and astronautics, the Year of the Agena -- bringing man far closer to understanding space and knowing how to use it.

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